FOLIA TAXONOMICA 8. PASSIFLORA TECTA (PASSIFLORACEAE), A NEW SPECIES IN SUBGENUS PASSIFLORA FROM THE GUIANAS

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ABSTRACT

Passiflora tecta, a new species with red flowers, is described from Guyana. It belongs in subgenus *Passiflora* supersection *Coccinea* and resembles *Passiflora coccinea* and *P. miniata*. The three species can easily be distinguished using corona characters. The outer corona filaments of *P. tecta* are scarlet and held nearly erect, slightly oblique inward like a narrow cone around the androgynophore. In *P. coccinea* the outer corona filaments are white and held oblique inward, while in *P. miniata* they are dark purple and nearly erect, slightly oblique outward like the rim of a flower pot.

RÉSUMÉ

Passiflora tecta, espèce nouvelle à fleurs rouges, est décrite de Guyana. Elle appartient au sous-genre *Passiflora* supersection *Coccinea* et est proche de *Passiflora coccinea* et *P. miniata*. Ces trois espèces sont faciles à reconnaître par les caractères de la couronne. Les filaments externes de *P. tecta* sont rouges et dressés, légèrement obliques en cône étroit autour de l'androgynophore. Les filaments externes de *P. coccinea* sont blancs et obliques en cône, tandis que ceux de *P. miniata* sont violet foncé et dressés, légèrement obliques vers l'extérieur comme le rebord d'un pot de fleur.

In Feuillet (2007) two new species were described in *Passiflora* subg. *Passiflora* supersect. *Coccinea* Feuillet & J.M. MacDougal, and a key to the species was given. In that paper, one branch in bracket 11 of the key led to "**P. sp.** (Guyana)", known only from photographs. Since publication of that manuscript, herbarium material has become available, thus allowing a good description to be drawn from actual specimens. This new species is described as *Passiflora tecta*.

Passiflora tecta Feuillet, sp. nov. (Fig. 1–2). Type: GUYANA. Potaro–Siparuni: Eagle Mountain, around the OMI base camp, 5°15'18"N, 59°6'59"W, 383 m, fl., 10 Sep 2006, K.M. Redden 4132 (HOLOTYPE: US; ISOTYPES: BRG, K).

Passiflora tecta in subg. Passiflora supersect. Coccinea pertinens; corona triseriata; P. coccineae affinis, coronae filamentis extimis rubris differt; P. miniatae affinis, coronae filamentis extimis rubris versus atropurpureis, intime versus extrinsecus obliquis differt.

Liana climbing on shrubs and small trees at forest edge, probably reaching the canopy. Young stems terete, slightly striate, with short, irregularly curved trichomes. Tendrils long, thin, with short arched trichomes. Vegetative bud in apical position, less than 1 mm away from the rest of the axillary complex (petiole, stipules, pedicel, tendril), prophylls acuminate at apex, densely short-pubescent. Stipules linear, 2.5 × 0.8 mm, short-pubescent, deciduous before the leaf differentiate in petiole and blade, leaving a round scar. Petiole 8–12 mm long, curved at base, with 2 lateral glands at the very base; glands scar-like, glandular surface oval, ca. 1 × 1.5 mm, with 1–2 tufts of long white trichomes, otherwise glabrous, rim minute pubescent. Blade ovate, 5–10 × 2.5–6 cm, bi-serrate, teeth ending in small, stipitate, round glands, acuminate and mucronate at the apex, broadly cordate and briefly cuneate at the base, drying brown adaxially and yellow-brown abaxially, 2–3 main lateral veins on each side of the midrib, the first pair about 2/3 as long as the midrib, tertiary venation scalariform. Inflorescence sessile, 1-flowered. Pedicels erect, 4.5–6.5 cm long, with dense short pubescence. Bracts three, verticillate, orange red, ovate, concave, 3–5 × 2–2.5 cm, free to base, round at the apex, glandular serrate at the margin on the apical two-thirds, with dense short trichomes on both surfaces. Flowers orange red, perianth lobes adaxially whitish at base; hypanthium 7 mm long, 9 mm broad on live material, round at base, inflated with the point of contact with the pedicel invaginated,



Fig. 1. Passiflora tecta in Guyana in Feb 2007 (photo by C. Kelloff). Petal 2.3 cm long.



Fig. 2. *Passiflora tecta* in Guyana in Feb 1990 (photo by C. Feuillet). Androgynophore 1.7 cm long.



Fig. 3. *Passiflora coccinea* in French Guiana in April 1985 (*Feuillet 2128*; photo by C. Feuillet). Outer corona filaments ca. 1 cm long.



Fig. 4. Passiflora miniata in cultivation in March 1990 (photo by C. Feuillet). Outer corona filaments 2.2 cm long.

densely short pubescent outside; sepals narrow-oblong, 2–2.5 cm long, plus a subapical awn, 0.7–1.0 cm long, 0.5–0.6 cm broad, short-pubescent in the parts exposed in bud, otherwise glabrous; petals similar to the sepal, slightly narrower, thinner, not awned, glabrous; corona bright red, in 3 rows, filamentose, the first 2 rows composed of laterally compressed, narrowly triangular filaments, erect to 70–80°, slightly oblique, leaning against the androgynophore and the ovary, the first row about 12 mm long, the second row about 9 mm long, the third row filiform, about 5–6 mm long; operculum borne at the top of the hypanthium, membranous, dependent to 2/3 down the hypanthium, then recurved inward, laciniate at the margin, 9–10 mm long, glabrous; nectar disc annular at the bottom of the hypanthium; limen membranous, surrounding the base of the androgynophore, 1–2 mm long, glabrous; androgynophore red throughout, cylindric, ca. 1.7 cm long, glabrous; stamen glabrous, filaments flat, pale green with red dots throughout, 6 × 1 mm, joined in a short membrane at base, anthers dorsifixed, rectangular, 6 × 2.5 mm; gynophore shorter than and covered by the membrane at the base of the androecium; ovary green, 6 mm long, 2–2.5 mm in diam., ellipsoid, densely short-pubescent; styles pink with red dots, 9–12 mm long, minutely pubescent; stigmatic surface light green, papillate. Immature fruit (according to photograph) green, hanging on elongated pedicel, hidden by yellowish green bracts.

Distribution.—The only specimen of Passiflora tecta known to me was collected in flower from Guyana, in the Potaro-Siparuni region, near Eagle Mountain in a clearing at the edge of the forest in September 2006. The same species has been photographed twice in Guyana, once in February 1990 (C. Feuillet) in the Upper Takutu-Upper Essequibo region near Surama, at the forest edge along a dirt road (with bud and young fruit), and again in February 2007 (C. Kelloff) in the Potaro-Siparuni region, in Kaieteur National Park (flower), though no herbarium specimens were made. The three localities are in western central Guyana and the plants were collected or photographed at the edge of lowland rainforest (less than 500 m elevation). Passiflora tecta could be easily confused with P. coccinea, the most common species of Passiflora in the Guianas.

Passiflora tecta sp. nov. clearly belongs to P. subgen. Passiflora supersect. Coccinea due to its distinctive leaves with serrate margins, red floral bracts with glandular-serrate margins, red-colored perianth, and straight corona filaments that form a cone angled towards the androgynophore. In this supersection, P. tecta most closely resembles P. coccinea Aubl. (Fig. 3), a species with a large Amazonian and Guianan distribution described from French Guiana (Aublet 1775). However, the Guianan endemic P. tecta has narrow-elliptic rather than ovate bracts and red rather than white outer corona filaments. Passiflora tecta also resembles P. miniata Vanderplank (Fig. 4), described from western Amazonia (Colombia, Brazil, Peru, and Bolivia) by John Vanderplank (2006), from which it differs in its outer corona filaments that are orange-red and slightly oblique inwards, rather than dark purple and slightly oblique outwards.

Etymology.—The Latin specific epithet means "covered." This refers to the three rows of corona filaments that restrict pollinator access to the nectar chamber contrary to the condition in *P. miniata*, where only the innermost row of filaments guard the throat.

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